OPERATING AND MAINTENANCE INSTRUCTIONS

TSI
TIRE SERVICE EQUIPMENT
MFG. CO. INC.

800.223.4540

3451 S. 40th Street
Phoenix, AZ 85040
602.437.5020

www.tsissg.com
info@tsissg.com
Fax 602.437.5025

MADE IN USA

October 27, 2015

SAFETY INSTRUCTIONS

WARNING:

Operator and bystanders must be behind the controls prior to engaging cutting operation
Hot surface! Do not touch hydraulic parts or tank during or after operation.
Observe all safety decals
Read and follow the Operator's manual
Operate in an area with adequate ventilation
These and other safety precautions are the responsibility of the end user
Please dispose of all waste and tires according to the laws governing your location
Wear personal protective equipment: eye, ear, foot and hand protection.

General : Do Not Allow Water or Moisture to come into contact with Engine, Electric Motor, Electrical Control System or any Electrical Components. Cover Engine and Electrical components if machine is to be washed.

Disconnect Electrical Power Supply and use proper Lock Out Tag Out (LOTO) established by your company before doing any maintenance. Contact the Engine manufacturer for proper procedures on maintenance and repairs.

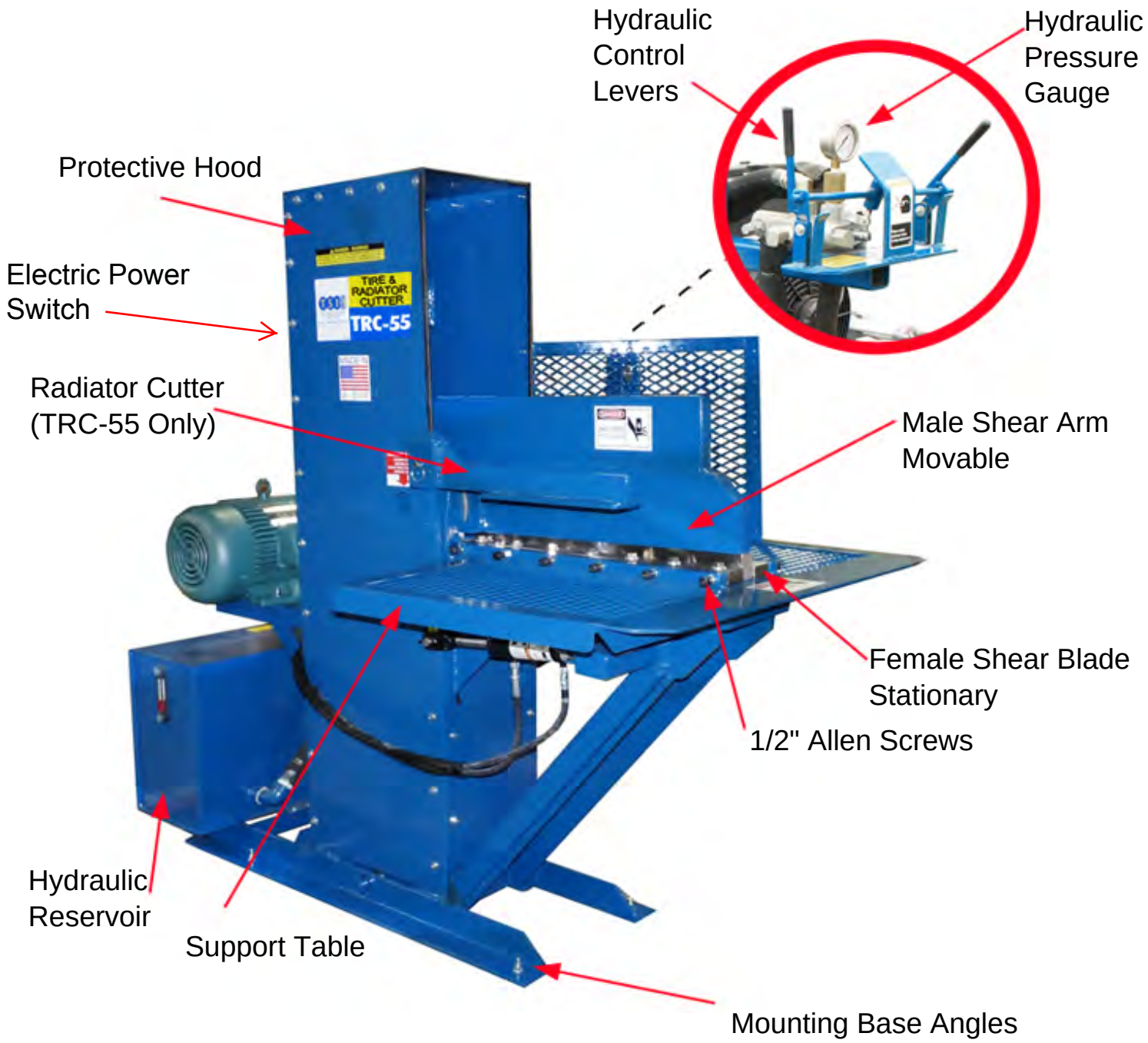
Power Choices : 18 HP B&S gasoline engine with electric start
10 HP, 3 Phase, 30 AMP, 440 V/230 V, 60 Hz/50 Hz
10 HP, Single Phase

TC-50 ONLY
9 HP B&S gasoline engine
3 HP, Single Phase, 220 V, 60 Hz/50 Hz

Electric Wiring: Motor rotation must be clockwise when looking at end of motor. If motor runs counter-clockwise reverse the wires as indicated on the motor plate diagram.

CAUTION: Operation of this machine for use other than cutting tires is strictly prohibitied. Stay clear of all moving parts when in use.

PRINCIPLE OPERATING PARTS



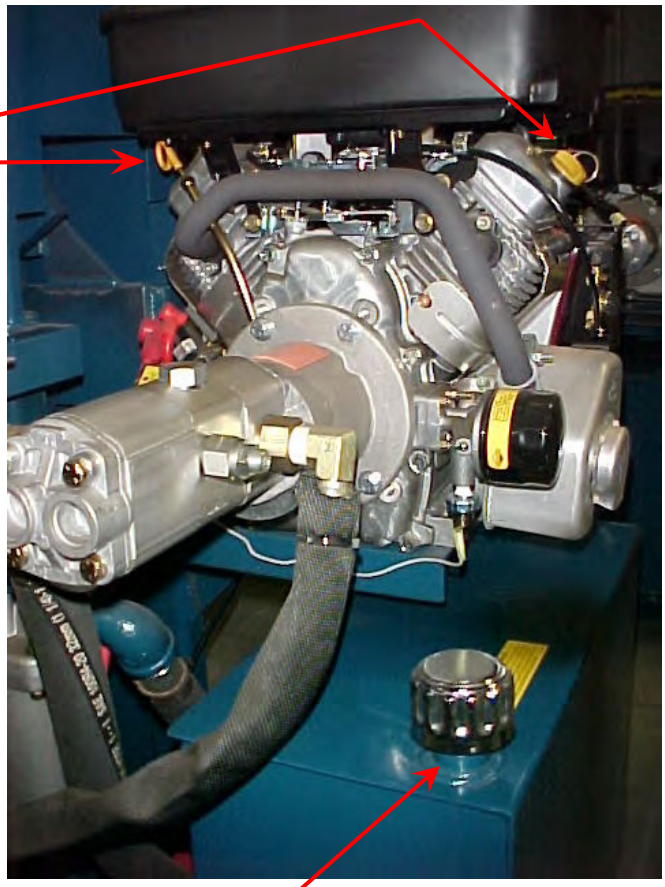
TRC-55 Tire & Radiator Cutter

SET-UP INSTRUCTIONS

Choose a non-slip surface that is level and has at least 5 feet around the footprint of the unit to prevent injury from flying debris. To uncrate the machine, cut the bands and remove the sidewalls and top of the crate. Unbolt the unit from the pallet and remove.

Check fluid levels

Check engine oil level and fill fuel tank in accordance with manufacturer's requirements.



Turn on fuel valve. Start engine using manufacture's operating instructions. When cutting tires run engine at 3/4 open throttle.

Remove plug in Oil Reservoir and install Breather Cap. See Maintenance on page 6 for Hydraulic fluid type and recommendations.

For Electric units refer to page 2 of this booklet for required power supply input.
See page 3 of this booklet for Electric Power Switch location.

NOTICE:	It is advised to use the holes in the Mounting Base Angles to properly secure this unit for operation.

OPERATING INSTRUCTIONS

WARNING: **Wear Personal Protective Gear for eye, ears, feet and hands.**

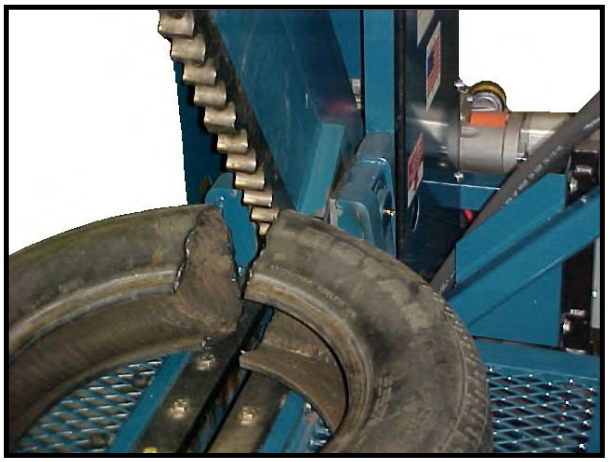
Care should be taken to load and unload tires to reduce bending and lifting. Use proper lifting techniques when using the Tire Cutters.

- Size up the load, ask for help if needed
- Lifting loads heavier than 50 lbs will increase the risk of injury.
- Lift items close to your body from a low position.
- Lift using your legs
- Carry the load close to your body from mid-thigh to mid-chest
- Avoid twisting, reaching or turning
- Information acquired from the US Dept. of Labor: Materials Handling Guidelines

Cutting:
Start engine or turn Power on.

To cut tire place it on support table with engine/motor running pull on both control handles.

Shear arm will come down and cut through one side of the tire as shown.



CAUTION

Do not leave unit "ON" and unattended.

WARNING: **Machine should be turned off prior to removing any debris**

Turn tire 180° and cut tire again. Repeat turning and cutting tire until the pieces of tire suits your needs. You can also cut down through the center of several pieces of tire treads.

Keep support table clear of debris for safe operation. Periodically make a visual check on moving parts to see no debris interferes with their movement.

MAINTENANCE INSTRUCTIONS

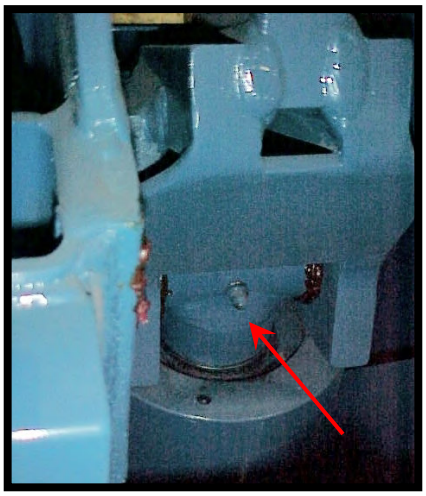
For maintenance shut off engine. Unplug Electric unit from power source.

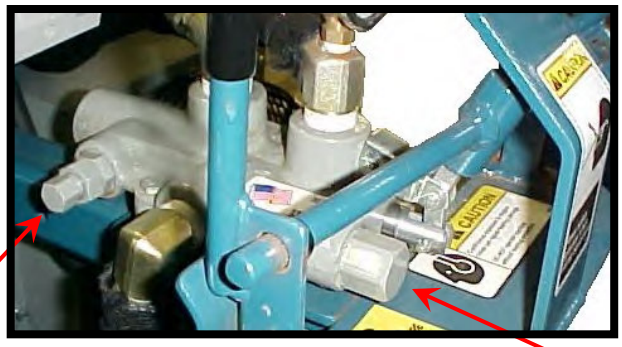
Follow engine manufacturers recommended maintenance requirements. Replace engine oil, oil filter, air filter and gas filter every 6 months.

Replace Hydraulic oil filter element TSI# 10130E every 6 months.

Drain and replace Hydraulic oil from reservoir once per year with SAE 20 or SAE 30 Automatic Transmission Fluid.

Grease unit as indicated:

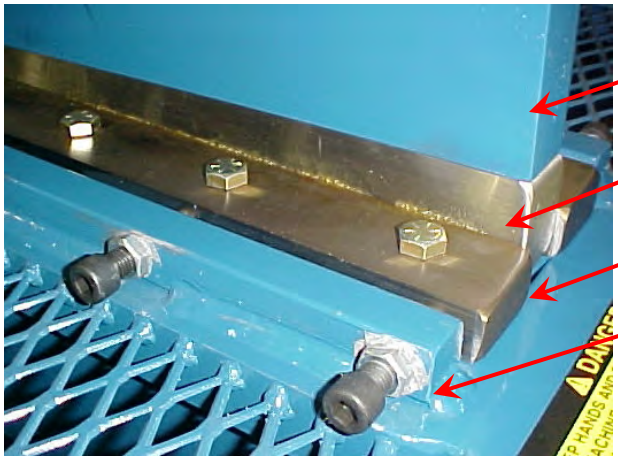




If valve "kicks out" on the shear arm return stoke, the detent will have to be slightly tightened. Tighten outer nut 1/4 turn and tighten lock nut. Continue to cut. If valve still "kicks out" readjust it another 1/4 turn.

Hydraulic pump pressure to the valve is to read 2800 PSI on the gauge. If pressure adjustment is needed, remove the cap and either loosen or tighten adjusting nut beneath the cap.

MAINTENANCE INSTRUCTIONS



Male Shear Arm

1/2" Bolts (7 per side)

Female Shear Bar (2)

1/2" Socket Head Screws & Locking Nut (6 each per side)

NOTE:
Extra stress is placed on machine if proper sharpness or adjustment is not maintained.

Female Shear Bar Adjustment:

As the steel belting from a tire starts to string out and not cut properly the original bar edges will eventually need to be adjusted.

To do this run the unit and stop the Male Shear Arm in position as shown above. Shut off or unplug unit.

Loosen the 1/2" Bolts (7) on one side of the unit and loosen the (6) Lock Nuts for the Socket Head Screws. Use an Allen Head wrench to adjust the Socket Head Screws to drive the Female Shear Bar securely flush against the Male Shear Arm and tighten the Lock Nuts. Do this for both sides. There should be zero clearance between the Male and Female Shears.

Changing the Female Shear Bars:

Each Female Shear Bar has 4 available cutting edges. Run the unit and stop the Male Shear Arm in position as shown above. Shut off or unplug the unit.

Remove the 1/2" Bolts from both sides as well as both Female Shear Bars. Loosen the Locking Nuts and back-out the Socket Head Screws so there's access to clean the mounting surface. It's a good idea to use Emery cloth to scrape the mounting surface as clean as possible.

Reposition each Female Shear Bar by choosing a newer edge to use for cutting.

Loosen the 1/2" Bolts (7) on one side of the unit and loosen the (6) Lock Nuts for the Socket Head Screws. Use an Allen Head wrench to adjust the Socket Head Screws to drive the Female Shear Bar securely flush against the Male Shear Arm and tighten the Lock Nuts. Do this for both sides. There should be zero clearance between the Male and Female Shears.

Maintaining the Male Cutter Bar:

The Male Cutter Bar may be turned end for end if it shows areas of wear. After turning it around make sure to readjust the Female Shear Bars as stated above.

MAINTENANCE INSTRUCTIONS

Use proper LOTO (Lock Out Tag Out) procedures as mandated by your company's safety policies.

Wear Personal Protective gear during maintenance procedures. Proper hand, foot and eye protection is recommended.

Disposal and storage of all fluids and debri is the end users responsibility to meet local and government regulations.

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Maintain reservoir oil level 3"(7.62 cm) from top with any brand or type of automatic transmission fluid. The machine comes with AMSTAR automatic transmission fluid. MSDS information for the hydraulic fluid in the Tire Cutter can be found on page 9 of this manual. Avoid contact with eyes, skin and inhalation.

Change the hydraulic filter every 6 months. Use 10 Micron hydraulic filter. To reorder TSISSG's Hydraulic filter element is part #10130E. The hydraulic filter is a 10 micron hydraulic filter. Please reference model and serial # of your machine when ordering parts.

Change oil filter every 6 months

WEAR PROTECTIVE GLOVES

READ THE MANUAL

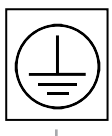
USE PROPER LOCK OUT, TAG OUT PROCEDURES

HAND CRUSH/PINCH POINT

FLYING DEBRIS/LOUD NOISES

HOT SURFACE

STAY CLEAR



PROTECTIVE EARTH GROUND

ELECTRICAL SHOCK

CE MARK

NEUTRAL

PHYSICAL EARTH

SAFETY DATA SHEET

Section 1. Identification

Western Petroleum
1200 North Concord
So. St. Paul, MN. 55075

CHEMTREC : **1-800-424-9300**
Technical Information : **1-651-457-3305**
SDS Information : **1-651-457-3305**

Product name : ATF-DM (Dexron III, Mercon)
Common name : Automatic Transmission Fluid.
Chemical name : Lubricating Oil.
Chemical family : Hydrocarbon.

SDS no : 1019-E1A0.4
Revision Date : 5/1/2015

Relevant identified uses of the substance or mixture and uses advised against

Transmission lubricant.

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2B
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (nose/sinuses) (oral) - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (nose/sinuses and throat) (inhalation) - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

GHS label elements

Hazard pictograms :

Signal word : Warning

Hazard statements : Causes skin and eye irritation.
May cause damage to organs if inhaled. (nose/sinuses, throat)
May cause damage to organs if swallowed. (nose/sinuses)
May cause respiratory irritation.

Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Hazardous Material Information System (U.S.A.) **Health :** 2 * **Flammability :** 1 **Physical hazards :** 0

National Fire Protection Association (U.S.A.) **Health :** 2 **Flammability :** 1 **Instability :** 0

Section 3. Composition/information on ingredients

Substance/mixture : Mixture
Chemical name : Lubricating Oil.
Other means of identification : Automatic Transmission Fluid.

Ingredient name	%	CAS number
Alkyl phosphites	5 - 10	-

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : If material comes in contact with the eyes, immediately wash the eyes with large amounts of water for 15 minutes, occasionally lifting the lower and upper lids. Get medical attention.

Inhalation : If person breathes in large amounts of material, move the exposed person to fresh air at once. If breathing has stopped, perform artificial respiration. Keep the person warm and at rest. Get medical attention as soon as possible.

Skin contact : If the material comes in contact with the skin, wash the contaminated skin with soap and water promptly. If the material penetrates through clothing, remove the clothing and wash the skin with soap and water promptly. If irritation persists after washing, get medical attention immediately.

Ingestion : If material has been swallowed, do not induce vomiting. Get medical attention immediately.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : May cause damage to organs following a single exposure if inhaled. May cause respiratory irritation.

Skin contact : Causes skin irritation.

Ingestion : May cause damage to organs following a single exposure if swallowed. Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following: pain or irritation, watering, redness.

Inhalation : Adverse symptoms may include the following: respiratory tract irritation, coughing.

Skin contact : Adverse symptoms may include the following: irritation, redness.

Ingestion : No known significant effects or critical hazards.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use water spray to cool fire exposed surfaces and to protect personnel. Foam, dry chemical or water spray (fog) to extinguish fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : Toxic fumes gases or vapors may evolve on burning.

Hazardous thermal decomposition products : No specific data.

Special protective actions for fire-fighters : When fighting fires wear full turnout gear and self contained breathing apparatus. Water may cause splattering. Material floats on water.

Special protective equipment for fire-fighters : Not applicable.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : Keep unnecessary and unprotected personnel from entering. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Methods and materials for containment and cleaning up

Spill : Contain with dikes or absorbent to prevent migration to sewers/streams. Take up small spill with dry chemical absorbent; large spills may require pump or vacuum prior to absorbent. May require excavation of severely contaminated soil.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.

Conditions for safe storage, including any incompatibilities : Handling temperatures should not exceed 175°F (80°C). Do not store above the following temperature: 113°C (235.4°F). Odorous and toxic fumes may form from the decomposition of this product if stored at excessive temperatures for extended periods of time. Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Distillates (petroleum), hydrotreated light paraffinic	**OSHA PEL (United States, 6/2010).** TWA: 5 mg/m³ 8 hours. **ACGIH TLV (United States, 3/2012).** TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction **NIOSH REL (United States, 6/2009).** TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist

Appropriate engineering controls : Use only with adequate ventilation.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Recommended: Splash goggles and a face shield, where splash hazard exists.

Skin protection

Hand protection : 4 - 8 hours (breakthrough time): Nitrile gloves.

Body protection : Recommended: Long sleeved coveralls.

Other skin protection : Recommended: Impervious boots.

Respiratory protection : If ventilation is inadequate, use a NIOSH-certified respirator with an organic vapor cartridge and P95 particulate filter.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid.

Color : Red or yellow.

Odor : Mild.

Odor threshold : Not available.

pH : Not available.

Melting point : Not available.

Boiling point : Not available.

Flash point : Closed cup: >193°C (>379.4°F)

Flammability : Not available.

Lower and upper explosive (flammable) limits : Not available.

Relative density : 0.85 to 0.88

Evaporation rate : <1 (Ether = 1)

Solubility : Not available.

Solubility in water : Insoluble

Partition coefficient: n-octanol/water : Not available.

Auto-ignition temperature : >260°C (>500°F)

Decomposition temperature : Not available.

SADT : Not available.

Viscosity : Not available.

Vapor pressure : <0.13 kPa (<1 mm Hg) (68°F)

Vapor density : Not available.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatible materials : Reactive or incompatible with the following materials: oxidizing materials.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

There is no data available.

Irritation/Corrosion

Skin : There is no data available.

Eyes : There is no data available.

Respiratory : There is no data available.

Sensitization

Skin : There is no data available.

Respiratory : There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity

There is no data available.

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

There is no data available.

Specific target organ toxicity (repeated exposure)

There is no data available.

Aspiration hazard

There is no data available.

Information on the likely routes of exposure : Dermal contact. Eye contact. Inhalation. Ingestion.

Section 12. Ecological information

Toxicity

There is no data available.

Persistence and degradability

There is no data available.

Bioaccumulative potential

There is no data available.

Mobility in soil

Soil/water partition coefficient (K_{OC}) : There is no data available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Section 14. Transport information

DOT IDENTIFICATION NUMBER Not applicable. **DOT proper shipping name** Not applicable.

DOT Hazard Class(es) Not applicable. **PG** Not applicable. **DOT EMER. RESPONSE GUIDE NO.** Not applicable

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) CDR Exempt/Partial exemption**: Not determined
United States inventory (TSCA 8b): Not determined.

Clean Air Act Section 602 Class I Substances : Not listed
Clean Air Act Section 602 Class II Substances : Not listed
Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) : Not listed
DEA List I Chemicals (Precursor Chemicals) : Not listed
DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Alkyl phosphites	5 - 10	No.	No.	No.	Yes.	No.

SARA 313 : This product (does/not) contain toxic chemicals subject to the reporting requirements of SARA Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

Product name	CAS number	%
Not applicable.		

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: Distillates (petroleum), hydrotreated light paraffinic

New York : None of the components are listed.

New Jersey : The following components are listed: Distillates (petroleum), hydrotreated light paraffinic; Distillates (petroleum), hydrotreated heavy paraffinic

Pennsylvania : None of the components are listed.

California Prop. 65 : No products were found.

Section 16. Other information

Revision date	: 08/15/2014	**Supersedes**	: 02/03/2010
Revised Section(s)	: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16.	**Prepared by**	: KMK Regulatory Services Inc.

Notice to reader

THE INFORMATION CONTAINED IN THIS SDS RELATES ONLY TO THE SPECIFIC MATERIAL IDENTIFIED. IT DOES NOT COVER USE OF THAT MATERIAL IN COMBINATION WITH ANY OTHER MATERIAL OR IN ANY PARTICULAR PROCESS. IN COMPLIANCE WITH 29 C.F.R. 1910.1200(g), CHS HAS PREPARED THIS SDS IN SEGMENTS, WITH THE INTENT THAT THOSE SEGMENTS BE READ TOGETHER AS A WHOLE WITHOUT TEXTUAL OMISSIONS OR ALTERATIONS. CHS BELIEVES THE INFORMATION CONTAINED HEREIN TO BE ACCURATE, BUT MAKES NO REPRESENTATION, GUARANTEE, OR WARRANTY, EXPRESS OR IMPLIED, ABOUT THE ACCURACY, RELIABILITY, OR COMPLETENESS OF THE INFORMATION OR ABOUT THE FITNESS OF CONTENTS HEREIN FOR EITHER GENERAL OR PARTICULAR PURPOSES. PERSONS REVIEWING THIS SDS SHOULD MAKE THEIR OWN DETERMINATION AS TO THE MATERIAL'S SUITABILITY AND COMPLETENESS FOR USE IN THEIR PARTICULAR APPLICATIONS.

Warranty Statement & Return Policy

Warranty & Workmanship you can depend on.

TSISSG products are designed and developed by experts in their respective industries. Our passion for designing and testing is second only to our drive for creating industry innovations and real world solutions which our customers can depend upon. With over 25 years of manufacturing experience we maintain the ability to provide competitive prices while employing and manufacturing in the USA. We are the manufacturer of the majority of our products so taking pride in workmanship and standing behind each and every product is not just our claim but our uncompromising responsibility.

TSISSG equipment is warranted to be free from defects in materials and workmanship for a period of one year from the date of original purchase to the original owner. Repair labor is warranted for 90 days from the date of original purchase. Bushings, blades, bearings and normal wear and tear are not covered under warranty. Careless handling, negligence, misuse, abuse, mutilation, improper operation, making unauthorized repairs, additions, and or alterations automatically cancel this warranty and relieves TSISSG of any obligation. Warranty parts need to be returned prepaid to the plant for credit. Any replacement parts shipped from the plant will be shipped at the customer's expense. Machines requiring warranty work must be brought to the manufacturing plant in Monticello, MN or to a repair facility authorized by TSISSG.

Return Policy:

!!WARNING!! Goods returned without an RGA will be refused. A Returned Goods Authorization form must be obtained before returning any material or goods. All non-warranty returns will be subject to a 15% restocking fee plus any additional charges for reconditioning/repacking.

TSI SSG
TIRE SERVICE EQUIPMENT MFG. CO. INC.
SAF-TEE SIPING & GROOVING INC.

DIVISION OF TSI/SSG
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3451 South 40th Street | Phoenix, Arizona 85040 | Toll Free 800.223.4540 | Fax 602.437.5025 | **www.tsissg.com**

SPECIFICATIONS

POWER SUPPLY & HYDRAULICS

TC-50

Unit Footprint:	24" x 40"
Cylinder Bore & Stroke:	5” x 12”
Cycle Time:	15 seconds approx.
System Pressure:	2,800 PSI Max

TC-55/TRC-55

Unit Footprint:	19" x 48"
Cylinder Bore & Stroke:	6” x 16”
Cycle Time:	14 seconds approx.
System Pressure:	2,800 PSI Max

MACHINE DIMENSIONS

TC-50

Size:	58” High x 64” Deep x 48” Wide
Weight:	1070 lbs. Approx.
Power of Unit: Gas	9 HP Briggs & Stratton
Power of Unit: Electric	3 HP, Single Phase, 220V, 60Hz /50Hz

TC-55/TRC-55

Size:	67” High x 74” Deep x 57” Wide
Weight:	1430 Lbs. Approx.
Power of Unit: Gas	18 HP Briggs&Stratton
Power of Unit: Electric	10 HP, 3 Phase, 30 Amp, 440 V/230 V, 60 Hz/ 50 Hz 10 HP, Single Phase

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